



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# California Regional Water Quality Control Board

## Santa Ana Region

Internet Address: <http://www.swrcb.ca.gov/~rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3339  
Phone (909) 782-4130 • FAX (909) 781-6288



Gray Davis  
Governor

July 26, 1999

Maneck G. Chichgar  
Senior Environmental Specialist  
Soil and Water Quality, Dept. PA 13-W9  
Northrop Grumman Corporation  
One Hornet Way  
El Segundo, CA 90245-2804

### MONITORING WELL INSTALLATION REPORT FOR ON-SITE AND OFF-SITE MONITORING WELLS AND RESULTS OF 4TH QUARTER GROUNDWATER MONITORING AT Y-12 FACILITY, 301 ORANGETHORPE AVENUE, ANAHEIM

Dear Mr. Chichgar:

This is regarding the *Monitoring Well Installation Report for On-site and Off-site Monitoring Wells and Results of Fourth Quarter Groundwater Monitoring Report* for the above-reference site that was transmitted to us with your February 18, 1999 correspondence. The report summarizes the results of further groundwater investigation conducted at the site during February and December 1998.

The investigation included installing three shallow monitoring wells, NMW-2A, NMW-3A, and NMW-5A (up to 95 feet below ground surface (fbgs) total depth), and one deeper monitoring well, NMW-5 (up to 125 fbgs total depth), on-site. In addition, monitoring wells NMW-7A (shallow) and NMW-7 (deeper) were installed off-site at the intersection of American Street and Liberty Avenue. In February 1999, Northrop Grumman collected depth discrete groundwater samples using Hydropunch™ technology in boring H-2B, located near monitoring well NMW-2, to characterize the vertical extent of the contaminant plume. However, due to access limitations, you stated that you were unable to install the two other off-site monitoring wells proposed in the work plan that we approved. The analytical results of groundwater samples collected during this investigation indicated the presence of volatile organic compounds (VOCs) in both the on-site and off-site downgradient wells. In addition, the analytical results indicated that TCE was the dominant VOC found in the discrete Hydropunch™ groundwater samples collected from H-2B. TCE was found to a depth of 190 feet in H-2B.

The results of the investigation indicate that the contaminant plume has migrated off-site. In addition, it appears that the vertical extent of the VOC impact is deeper than was measured at Hydropunch™ location H-2B. Northrop Grumman has not fully defined the off-site lateral and vertical extent of the contaminant plume. Therefore, we request Northrop Grumman to conduct further investigations to delineate the off-site extent of the contaminant plume. In view of the

*California Environmental Protection Agency*

difficulties in obtaining access agreement to install monitoring wells NMW-6 and NMW-6A at the originally proposed location, we request that you select alternate downgradient locations to install these wells. By **August 27, 1998**, please submit a work plan to conduct an investigation downgradient of monitoring wells NMW-7A and NMW-7. If you have any questions, please contact me at (909) 782-3298.

Sincerely,

Robert L. Holub, Chief  
SLIC Section

cc: Orange County Water District – Roy Herndon  
Orange County Health Care Agency – Luis Lodrigueza  
City of Anaheim – Richard Wilson  
Malcolm Pirnie – James W. Babcock

aca:rlh:data/slic/northrup/offsitwel